CW#82H: SystemOfLinearQuadratic

Honors Geometry

Monday, February 22nd

*Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PD:\_\_\_\_\_\_*

|  |  |
| --- | --- |
| ***Reminder #1: A system of equations consists of two equations with two unknowns.***  ***Reminder #2: You can solve systems of linear and quadratic equations graphically and algebraically.*** | |
| 1. Make some predictions…    1. What should you be able to observe when you graph a system of equations that has two solutions?    2. What should you be able to observe when you graph a system of equations that has one solution?    3. What should you be able to observe when you graph a system of equations that has no solutions? | |
| **Solving a System of Equations by Graphing** | |
| 1. Graph the system below and determine the solution(s) of the system. | 1. Graph the system below and determine the solution(s) of the system. |
| 1. Graph the system below and determine the solution(s) of the system. | 1. Graph the system below and determine the solution(s) of the system. |
| **Solving a System of Equations by Elimination** | |
|  | 7.) |
| 1. Since opening day, attendance at Pool A has increased steadily, while attendance at Pool B first rose and then fell. Equations modeling the daily attendance *y* at each pool are shown below, where *x* is the number of days since opening day. On what day(s) was the attendance the same at both pools? What was the attendance on that/those day(s)? | |
| **Solving a System of Equations by Substitution** | |
|  |  |
|  |  |
| 1. A company’s logo consists of a parabola and a line. The parabola in the logo can be modeled by the function . The line intersects the parabola when and when . What is an equation of the line? | |
| 1. The daily number of customers *y* at a coffee shop can be modeled by the function , where *x* is the number of days since the beginning of the month. The daily number of customers at a second shop can be modeled by a linear function. Both shops have the same number of customers on days 10 and 20. What function models the number of customers at the second shop? | |